

Work Order ID 134932

Wednesday, July 22, 2015 4:16:49 PM

134932

Page 1

Item ID: 646.4001

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: AS350 Cable Cutter System

Start Date: 7/17/15 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 7/22/15 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: MLS Date: JUL 23 2015 Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
646.4000	B	* SP							

100	Document Control	0.00				DAS 6 9-89		AUG 28 2015	
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100

DC	Memo	0.00
Doc.Control -USB or Paperwork	Photocopy bluefile & type labels per PPP 646.4001	

110	Pick Kit	0.00
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110

Packaging	Memo	0.00
Packaging		

1x SP 15-08-04

120	QC4- 100% Inspect kits for completeness	0.00
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120

QC	Memo	0.00
Quality Control		

DAS
6
9-89

DAS
6
9-89

AUG 31 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130

0.00

130

Packaging

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP 646.4001

Location: Sold15-08-31

140

0.00

140

QC21- Final Inspection - Work Order Release

QC

Memo

0.00

Quality Control

15/8/31MF
15-8-31

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Picklist Print

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Page 1

Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM
IPP REV:B 15.01.08 AS PER DWG REV.B DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.3301		Manufactured	No				Each	6.0000		1			DAS 26 9-89
646 3301									**				DAS 02 9-89

Upper Cutter Assy

Location

Loc Qty

Loc Code

CCK042

6

123396

5

124729

1

646.3001

Manufactured No

Each

7.0000

DAS
26
9-89

646 3001

Lower Cutter Assy

Location

Loc Qty

Loc Code

CCK045

7

124733

7

646.2910

Manufactured No

Each

10.0000

DAS
26
9-89

646 2910

Deflector

Location

Loc Qty

Loc Code

CCK050

10

123356

10

AUG 06 2015

DAS
02
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Page 2

Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

646.3810

Manufactured No

Each

14.0000

646 3810

Bracket

**

DAS
26
9-89

DAS
6
9-89

Location

Loc Qty

Loc Code

cck023a

6

131001

6

cck104

8

127867

2

132616

6

Each

13.0000

**

DAS
02
9-89

646.3510

Manufactured No

646 3510

Strut

Location

Loc Qty

Loc Code

cck101

2

106666

2

cck15a

11

127077

11

Each

10.0000

**

DAS
02
9-89

DAS
6
9-89

646.3511

Manufactured No

646 3511

Strut

Location

Loc Qty

Loc Code

cck102

6

127082

6

cck15a

4

102891

4

DAS
6
9-89

AUG 06 2015

DAS
02
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

Wednesday, July 22, 2015 4:16:45 PM

Page 3

Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

647.0112

Manufactured No

Each

199.0000

DAS
26
9-89

DAS
02
79

647 0112

Strut Bracket

**

DAS
6
9-89

Location

Loc Qty

Loc Code

CCK109

199

112215

30

122245

5

122871

50

123318

22

M130388

92

647.7703

Manufactured No

Each

4.0000

DAS
26
9-89

DAS
02
9-89

647 7703

Strut Assembly

DAS
6
9-89

134897

**

Location

Loc Qty

Loc Code

CCK112

4

130284

4

NAS1149F0332P

Purchased No

Each

2,176.000

DAS
26
9-89

DAS
02
9-89

NAS1149F0332P

Washer

**

68-6
9
DAS

Location

Loc Qty

Loc Code

GA

222

122063

222

ST260a

1861

m128401

6

m131026

80

m131697

1775

st268

93

123900

7

m130388

86

AUG 06 2015

1387

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

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Page 4

Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

Each

1,192.000

61

MS21042L3

Nut

**

132883

DAS 26 9-89
DAS 02 9-89

Location

Loc Qty

Loc Code

FP001

393

M130922

393

GA

331

M131317

331

ST305

468

116549

12

126333

49

M128754

2

M132123

17

M132382

388

646.3110

Manufactured

No

Each

5.0000

646 3110

Channel

**

DAS 26 9-89
DAS 02 9-89

Location

Loc Qty

Loc Code

cck020

5

126780

2

133124

3

646.3710

Manufactured

No

Each

28.0000

646 3710

Doubler

**

DAS 26 9-89
DAS 02 9-89

Location

Loc Qty

Loc Code

CCK015

28

113729

2

127550

26

68-6
9
DAS

AUG 06 2015

Wednesday, July 22, 2015 4:16:46 PM

Shop Packet Print

Page 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																															
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OTHER : ☐																																																																							

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Page 5

Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

646.3210

Manufactured No

Each 2.0000

**

DAS

DAS

26

02

9-89

9-89

Support

DAS

6

9-89

Location

Loc Qty

Loc Code

cck020

2

126777

2

Each

20.0000

**

DAS

26

9-89

DAS

02

9-89

646.3713

Manufactured No

Each 20.0000

**

646.3713

Gusset

DAS

6

9-89

Location

Loc Qty

Loc Code

cck103

20

120631

20

Each

207.0000

**

DAS

26

9-89

DAS

02

9-89

MS24694-S51

Purchased No

Each 207.0000

**

MS24694-S51

Screw

DAS

6

9-89

Location

Loc Qty

Loc Code

ST289

207

m130928

207

Each

64.0000

**

DAS

26

9-89

DAS

02

9-89

AN3-13A

Purchased No

Each 64.0000

**

AN3-13A

Bolt

DAS

6

9-89

Location

Loc Qty

Loc Code

CA

3

m129682

3

GA

20

m127070

20

ST349

41

m131305

41

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
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LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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Page 6

Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

AN3-4A Purchased No

Each 228.0000

AN3-4A

Bolt
DAS
6
9-89

Location

Loc Qty

Loc Code

CA

110

m129682

110

ST350

118

m132317

118

Each 132.0000

CR3213-5-3 Purchased No

CR3213-5-3

Cherry Rivet

5-03

DAS
6
9-89

Location

Loc Qty

Loc Code

ST319

132

m127831

30

m130388

2

m132763

100

Each 231.0000

MS20470AD5-5.5 Purchased No

MS20470AD5-5.5

Rivet
DAS
6
9-89

Location

Loc Qty

Loc Code

ST310

231

123425

231

Each 40.0000

646.3711 Manufactured No

646.3711

Clip
DAS
6
9-89

Location

Loc Qty

Loc Code

cck103

40

120626

40

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Page 6

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																		
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																		
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																		
Large Fab ☐	Composite ☐	Supplier ☐																			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval																	
Description Work Order Deviation		Disposition		Completed By																	
				Lead hand / Supervisor Approval Verification																	
				QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐																
OTHER :																					

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Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

646.3712 Manufactured No

Each 30.0000

1

646 3712

Clip
DAS
6
9-89

Location

Loc Qty

Loc Code

cck103

30

101119

1

120630

29

Each

27.0000

**

DAS
26
9-89
DAS
02
9-89

646.3811 Manufactured No

646 3811

Radius Block

DAS
6
9-89

Location

Loc Qty

Loc Code

cck104

27

110717

12

122938

15

Each

196.0000

**

DAS
26
9-89

DAS
02
9-89

AN3-6A Purchased No

AN3-6A

Bolt

DAS
6
9-89

Location

Loc Qty

Loc Code

ST338a

100

M131305

100

ST349

96

M132680

96

Each

158.0000

**

DAS
26
9-89

DAS
02
9-89

MS24694-S55 Purchased No

MS24694-S55

Screw

DAS
6
9-89

Location

Loc Qty

Loc Code

ST289

158

m127305

3

m131624

55

m132803

100

**

DAS
26
9-89

DAS
02
9-89

AUG 05 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">Skid-tube ☐</td> <td style="width:15%;">Cross tube ☐</td> <td style="width:15%;">Water Jet ☐</td> <td style="width:15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
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Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :																							
Misidentified ☐	Past Due ☐																								

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Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

646.3610 Manufactured No

Each 7.0000

646 3610

Filler

DAS
6
9-89

**

DAS
26
9-89
DAS
02
9-89

Location

Loc Qty

Loc Code

cck103

7

124514

1

127737

6

Each

21.0000

**

DAS
26
9-89
DAS
02
9-89

646.3714 Manufactured No

646 3714

Gusset

DAS
6
9-89

Location

Loc Qty

Loc Code

cck103

21

120632

21

Each

1,112.000

**

DAS
26
9-89
DAS
02
9-89

MS20470AD5-6 Purchased No

MS20470AD5-6

RIVET

DAS
6
9-89

Location

Loc Qty

Loc Code

CCK004

890

124089

890

ST309

222

105433

222

Each

14.0000

**

DAS
26
9-89
DAS
02
9-89

646.3812 Manufactured No

646 3812

Gusset Bracket

DAS
6
9-89

Location

Loc Qty

Loc Code

cck023a

8

127358

2

130858

6

cck104

6

132425

6

AUG 05 2015

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Page 9

Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

AN3-3A

Purchased

No

Each

475.0000

**

DAS
26
9-89

AN3-3A

Bolt

DAS
6
9-89

Location

Loc Qty

Loc Code

ST338a

200

m131624

200

ST350

275

m132317

275

Each

19.0000

**

DAS
26
9-89
DAS
02
9-89

646.3813

Manufactured

No

646 3813

Strut Bracket

DAS
6
9-89

Location

Loc Qty

Loc Code

cck104

5

132541

5

CCK23a

14

122968

3

124265

4

127453

4

130946

3

Each

566.0000

**

DAS
26
9-89

MS20470AD5-7

Purchased

No

MS20470AD5-7

Rivet

DAS
6
9-89

Location

Loc Qty

Loc Code

ST309

566

123425

566

AUG 05 2015

DAS
02
9-89

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Shop Packet Print

Page 9

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Picklist Print

Page 10

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Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

MS21047-3

Purchased

No

Each

152.0000

18

MS21047-3

Nut Plate

DAS
6
9-89

Location

Loc Qty

Loc Code

ST303

152

m130388

8

m132382

44

m132763

50

m132803

50

Each

313.0000

**

DAS
26
9-89
DAS
02
9-89

CCR264SS3-02

Purchased

No

CCR264SS3-02

Rivet, Cherry

DAS
9-89

Location

Loc Qty

Loc Code

ST321

313

M131803

13

M132317

300

Each

254.0000

**

DAS
26
9-89
DAS
02
9-89

AN3-5A

Purchased

No

AN3-5A

Bolt

DAS
6
9-89

Location

Loc Qty

Loc Code

CA

132

m129682

132

GA

122

m131420

122

Each

12.0000

**

DAS
26
9-89
DAS
02
9-89

646.3715

Manufactured

No

646 3715

Strut Doubler

DAS
6
9-89

Location

Loc Qty

Loc Code

cck103

12

131050

8

132668

4

**

DAS
26
9-89
DAS
02
9-89

AUG 05 2015

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Shop Packet Print

Page 10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐													
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval										
Description Work Order Deviation				Disposition				Completed By									
								Lead hand / Supervisor Approval Verification									
								QC / QA Coordinator Approval									
Root Cause		FAULT CATEGORY															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____									
Misidentified ☐	Past Due ☐																

Picklist Print

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Page 11

Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-12

Purchased

No

Each

54.0000

MS27039-1-12

Screw

DAS
6
9-89

Location

Loc Qty

Loc Code

ST285

54

m128799

2

m131317

52

Each

11.0000

**

DAS
26
9-89

DAS
02
9-89

646.3716

Manufactured

No

646 3716

Gauge Bracket

DAS
6
9-89

Location

Loc Qty

Loc Code

cck103

11

122908

5

133105

6

Each

146.0000

**

DAS
26
9-89

DAS
02
9-89

MS20426AD5-7

Purchased

No

MS20426AD5-7

RIVET

DAS
6
9-89

Location

Loc Qty

Loc Code

ST312

146

101340

46

M132767

100

Each

34.0000

**

DAS
26
9-89

DAS
02
9-89

MS24694-S54

Purchased

No

MS24694-S54

SCREW

DAS
6
9-89

Location

Loc Qty

Loc Code

ST289

34

m130388

6

m132344

28

**

DAS
26
9-89

DAS
02
9-89

AUG 05 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

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Page 12

Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 4.00

Required Qty: 1.00

MS27039-1-21

Purchased

No

Each

452.0000

MS27039-1-21

Screw

**

DAS
26
9-89
DAS
02
9-89

Location

Loc Qty

Loc Code

ST273A

395

m127904

395

ST284

57

124326

8

m126319

49

Each

230.0000

**

DAS
26
9-89
DAS
02
9-89

MS27039-1-20

Purchased

No

MS27039-1-20

Screw

Location

Loc Qty

Loc Code

ST284

230

124326

230

Each

266.0000

**

DAS
26
9-89
DAS
02
9-89

MS27039-1-19

Purchased

No

MS27039-1-19

Screw

Location

Loc Qty

Loc Code

GA

124

m124326

32

m127904

92

ST273A

135

m127904

135

ST284

7

m127904

7

AUG 05 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

646.3717 Manufactured No

Each 20.0000

646 3717

Doubler

DAS
6
9-89

Location

Loc Qty

Loc Code

cck103

20

120633

20

Each

10.0000

**

DAS
26
9-89
DAS
02
9-89

646.3718 Manufactured No

646 3718

Custom Washer

DAS
6
9-89

Location

Loc Qty

Loc Code

cck103

10

132698

10

Each

35.0000

**

DAS
26
9-89
DAS
02
9-89

646.3719 Manufactured No

646 3719

Doubler

DAS
6
9-89

Location

Loc Qty

Loc Code

cck104

4

123589

4

cck126

31

120634

31

**

DAS
26
9-89
DAS
02
9-89

AUG 05 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Picklist Print

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Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 100

Required Qty: 1.00

MS27039-1-10

Purchased

No

Each

679.0000

MS27039-1-10
SCREW

**

DAS
26
9-89
DAS
02
9-89

Location	Loc Qty	Loc Code
CA	41	
m128635	41	
GA	234	
m129541	234	
ST273A	200	
m132677	200	
ST285	204	
m123522	2	
m130358	2	
m132640	200	

DAS
6
9-89

AN3-11A

Purchased

No

Each

104.0000

AN3-11A
Bolt

**

DAS
26
9-89
DAS
02
9-89

Location	Loc Qty	Loc Code
ST338a	104	
m125709	104	

600.0990

Purchased

No

Each

54.0000

600.0990
MAGNABOND 6398 PART A

**

DAS
02
9-89

Location	Loc Qty	Loc Code
CA2	26	
M131589	26	2/11/16
PKG	28	
M129818	28	7/16/15

2x11
Nov 7, 2015

DAS
6
9-89

AUG 05 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

Picklist Print

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Wednesday, July 22, 2015 4:16:47 PM

Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

600.0991 Purchased No

Each 54.0000

600 0991

MAGNOBOND 6398 PARIT B

DAS

6

9-89

**

DAS
26
9-89
DAS
02
9-89

Location

Loc Qty

Loc Code

CA2

27

2/11/16

m131589

27

PKG

27

7/16/15

M129818

27

Each

26.0000

**

DAS
26
9-89
DAS
02
9-89

600.1012 Purchased No

600 1012

Sealant PR1425B2 (#654 sem)

Location

Loc Qty

Loc Code

cck017

20

m132805

20

cck018

6

m129749

2

m131364

4

10/30/15

f

328.0000

**

DAS
26
9-89
DAS
02
9-89

600.0129 Purchased No

600 0129

VHB TAPE 75935A651

DAS

6

9-89

Location

Loc Qty

Loc Code

CCK095

272

m131311

272

CCK096

56

m127920

56

Each

945.0000

**

DAS
26
9-89
DAS
02
9-89

600.1013 Purchased No

600 1013

021200-3M TAPE PRIMER 94 PRIMER 24216

Location

Loc Qty

Loc Code

CCK095

945

m131145

945

6/15/16

AUG 05 2015

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				

Picklist Print

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Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

646.3910 Manufactured No

Each 60.0000

DAS

26

9-89

DAS

02

9-89

646 3910

Shim

**

Location

Loc Qty

Loc Code

cck023a

60

122951

60

Each

82.0000

**

DAS

26

9-89

DAS

02

9-89

646.3911 Manufactured No

646 3911

Shim

Location

Loc Qty

Loc Code

cck023

50

126059

50

cck104

20

118824

2

126229

18

k023a

12

123075

12

Each

93.0000

**

DAS

26

9-89

DAS

02

9-89

646.3912 Manufactured No

646 3912

Shim

Location

Loc Qty

Loc Code

cck023a

60

123143

50

124501

10

cck104

33

103082

1

123530

32

AUG 05 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

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Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

646.3913 Manufactured No

Each 122.0000 1

646 3913
Shim

**

DAS 26 9-89 02 7-89

Location Loc Qty Loc Code

cck023a 25

124108 25

cck023aq 82

126060 82

cck104 15

100136 2

(126231) 13

Each 58.0000

**

DAS 26 9-89 02 9-89

AN3-12A Purchased No

AN3-12A
Bolt

Location Loc Qty Loc Code

CA 57

m129682 57

GA 1

m130566 1

Each 222.0000

**

DAS 26 9-89 02 9-89

MS27039-1-16 Purchased No

MS27039-1-16
Screw

Location Loc Qty Loc Code

ST285 222

m130224 18

m130388 4

m131317 100

m132344 100

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			Completed By
					Lead hand / Supervisor Approval Verification
					QC / QA Coordinator Approval
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

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Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0432P

Purchased

No

Each

1,305.000

NAS1149F0432P
WASHER

**

M132677

DAS
26
9-89

DAS
02
9-89

DAS
6
9-89

Location

Loc Qty

Loc Code

ST260a

1234

M131697

134

M132551

500

M132677

600

st268

71

M128995

63

M130388

8

Each

3,394.000

**

DAS
26
9-89

DAS
02
9-89

MS21042L4

Purchased

No

MS21042L4
Locknut

Location

Loc Qty

Loc Code

FP001

2

m124231

2

GA

142

m127813

142

ST260a

170

m130799

56

m131803

6

m132262

108

ST305

3080

m128300

8

m130388

7

m130922

97

m131618

12

m132123

56

m132382

2900

DAS
6
9-89

AUG 04 2015

2x

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition			Completed By																		
							Lead hand / Supervisor Approval Verification																		
							QC / QA Coordinator Approval																		
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	OTHER : _____																			

Picklist Print

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Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

AN316C4R

Purchased

No

Each

41.0000

AN316C4R

NUT

DAS
6
9-89

Location

Loc Qty

Loc Code

ST331

41

m127584

6

m127618

20

m127838

13

m130388

2

**

DAS
26
9-89
DAS
02
9-89

MS21042-3

MS21042L3

Purchased

No

Each

585.0000

MS21042-3

Nut / use MS21042L3

DAS
68-6
9
SWD

Location

Loc Qty

Loc Code

CA

501

M129682

501

ST305

84

6931

8

M128770

10

M129541

15

M130388

51

**

DAS
26
9-89
DAS
02
9-89

MS27039-08-13

Purchased

No

Each

435.0000

MS27039-08-13

Screw

DAS
68-6
9
SWD

Location

Loc Qty

Loc Code

ST273A

346

124326

346

ST281

89

123352

16

4067

69

M130388

4

**

DAS
26
9-89
DAS
02
9-89

AUG 04 2015

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

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Work Order ID: 134932

134932

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 7/17/15

Required Date: 7/22/15

Start Qty: 1.00

Required Qty: 1.00

MS21042-08

MS21042L08

Purchased

No

Each

33.0000

MS21042-08

USE MS21042L08

**

m131697.

DAS

26

9-89

DAS

02

9-89

Location

Loc Qty

Loc Code

ST304

25

122815

25

ST306

8

m130388

8

Each

3,047.000

**

m123900.

DAS

26

9-89

DAS

02

9-89

NAS1149FN832P

Purchased

No

NAS1149FN832P

Washer

Location

Loc Qty

Loc Code

ST260a

1704

125268

1704

st268

1343

125268

422

M130388

921

AUG 04 2015

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								

APICAL

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04731

SHEET 1 OF 2

DWG NO. 646.4000

REV: A

PREPARED BY J. SOTO

DATE: 11/04/2014

EFFECT ON DWG
☒ INC. ☐ UNINC.

DWG TITLE: AS350 CABLE CUTTERS KIT

APPROVED BY:

ENGR

MFG

QC

EFF.

NEXT ORDER

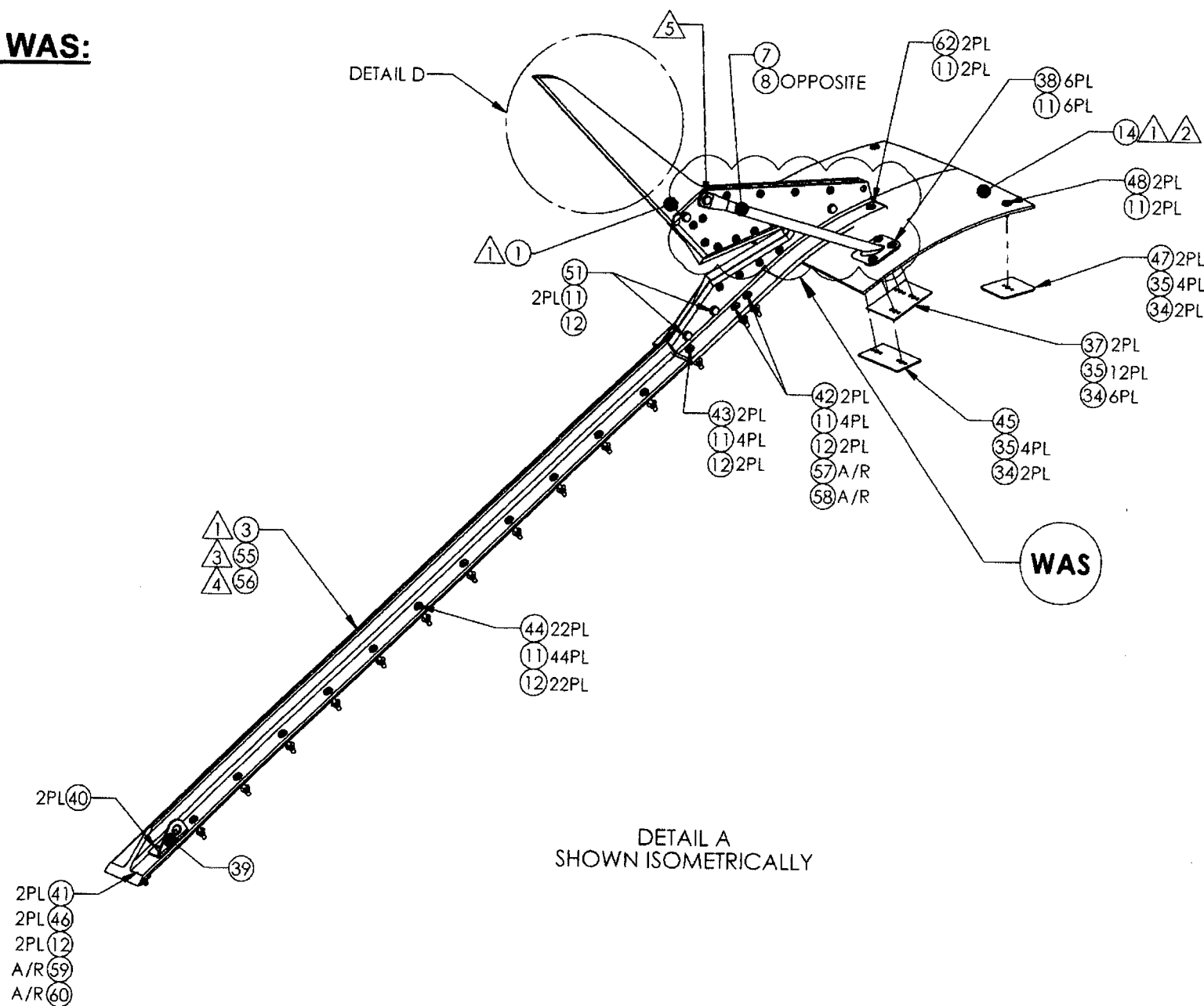
TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: REVISED BOM. INCORPORATED ECN 03046 AND 03079.

134932 MJS
15-07-23

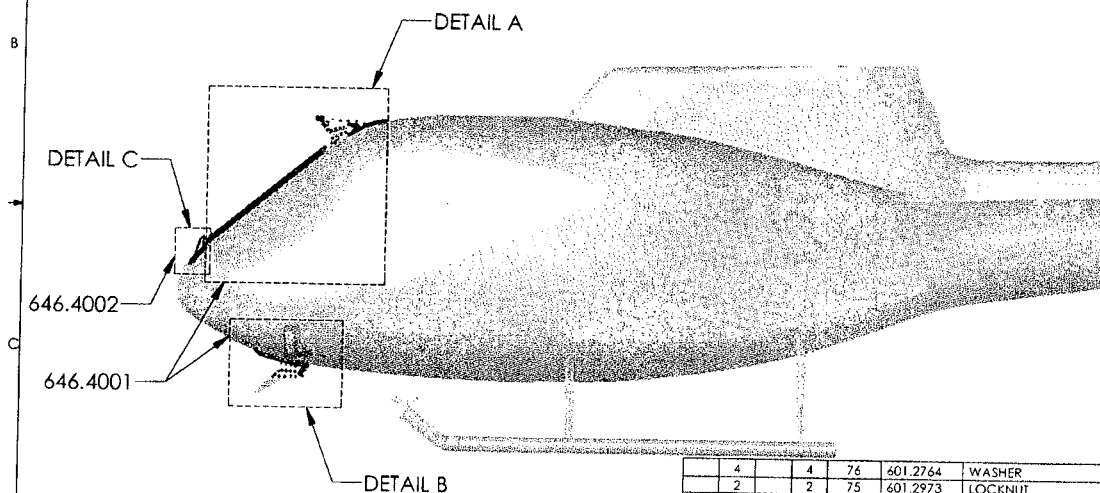
76	A	601.2764	4	4	WASHER	NAS1149FN832P	
75	A	601.2973	2	2	LOCKNUT	MS21042-08	
74	A	601.2988	2	2	SCREW	MS27039-0813	
73	A	601.2943	2	2	LOCKNUT	MS21042-3	
72	A	601.3128	2	2	NUT	AN316C4R	
71	A	601.3209	2	2	LOCKNUT	MS21042L4	
70	A	601.2638	4	4	WASHER	NAS1149F0432P	
69	A	601.2669	2	2	BOLT	AN4C7A	
68	A	601.3119	2	2	CLEVIS	AN665-34R	
67	A	601.3121	2	2	EYE BOLT	AN44-57	
66	A	650.9201	2	2	EYE BRACKET ASSY		
51	R	601.2926	10	10	BOLT	AN3-11A	
12	R	601.1624	53	61	LOCKNUT	MS21042L3	
11	R	601.1607	120	138	WASHER	NAS1149F0332P	
8	R	647.7703	2	2	STRUT ASSY		
7	R	647.0112	2	2	STRUT BRACKET		
F/N	TC	PART NUMBER	.4003	.4001			
			QTY		DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:						CHANGE CATEGORY	DER REVIEW REQUIRED
☐ MDL ☒ INSTALL INSTRUCTIONS ☒ ICA ☐ FMS ☒ BOM						☐ MAJOR ☒ MINOR	☐ YES ☒ NO

SHEET 2 WAS:



NOTES:

- 1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES
- 2 INSTALL F/N 14 WITH F/N 52 & 53
- 3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR : MCMMASTER-CARR P/N 75935A651
- 4 3M TAPE PRIMER 94. APPLY TO BOTH SURFACES A/R BEFORE TAPE
VENDOR: R.S. HUGHES P/N 021200-24216
- 5 REUSE FASTENERS FROM F/N 1
- 6 USE WASHERS AS REQUIRED AS SHIMS TO OBTAIN BEST FITMENT
- 7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ONTO F/N 1

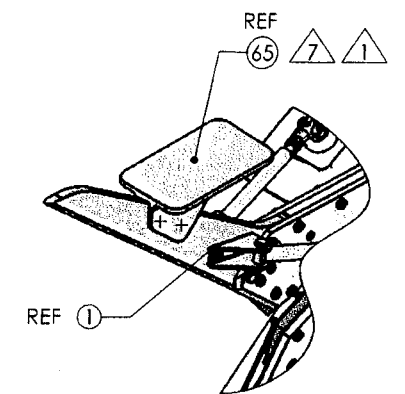
[illegible]

REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECHS 0219 0131, 02710 & 02745	01/08/2010	P. BRAYO
B	INCORPORATED ECHS 0244, 03079 & 04731	11/04/2014	P. BRAYO

8 FT	8 FT	55	600.0129	VHS TAPE					
1	1	54	600.1012	SEALANT					FR-1425 CLASS B
1	1	53	600.0991	MAGNOBOND 6398 PART B					
1	1	52	600.0990	MAGNOBOND 6398 PART A					
10	10	51	601.2826	BOLT					AN3-11A
	2	50	646.3814	WIPER BRACKET					
	2	49	601.2910	SCREW					
2	2	48	601.1365	SCREW					MS27039-1-18
2	2	47	646.3719	DOUBLER					MS27039-1-10
	2	46	646.3718	CUSTOM WASHER					
1	1	45	646.3717	DOUBLER					
	22	2	44	601.1948	SCREW				MS27039-1-19
	2	2	43	601.1952	SCREW				MS27039-1-30
4	4	42	601.1956	SCREW					MS27039-1-21
2	2	41	601.2829	SCREW					MS24694554
2	2	40	601.2831	RIVET					MS20426A05-7
1	1	39	646.3716	GAUGE BRACKET					
6	6	38	601.1953	SCREW					MS27039-1-12
2	2	37	646.3715	STRUT DOUBLER					
	2	36	601.2824	BOLT					AN3-5A
36	36	35	601.2277	RIVET					CCRM445-302
18	18	34	600.0795	NUT/PLATE					MS21047-3
3	3	33	601.2565	RIVET					MS20470A05-7
1	1	32	646.3813	STRUT BRACKET					
4	4	31	601.2822	BOLT					AN3-3A
2	2	30	646.3812	GUSSET BRACKET					
8	8	29	601.2564	RIVET					MS20470A05-6
1	1	28	646.3714	GUSSET					
	1	27	646.3610	FILLER					
	1	26	601.2830	SCREW					MS24694555
2	2	25	601.2825	BOLT					AN3-6A
1	1	24	646.3811	RADIUS BLOCK					
	1	23	646.3712	CLIP					
	1	22	646.3711	CLIP					
8	8	21	601.2832	RIVET					MS20470A05-5.5
14	14	20	601.2020	RIVET					CR3213-5-3
10	10	19	601.2823	BOLT					AN2-4A
	1	18	601.2827	BOLT					AN3-13A
5	5	17	601.2912	SCREW					MS24694551
	1	16	646.3713	GUSSET					
	1	15	646.3210	SUPPORT					
1	1	14	646.3710	DOUBLER					
	1	13	646.3110	CHANNEL					
8	53	6	61	12	601.1624	LOCKNUT			MS21042L3
18	120	16	138	11	601.1607	WASHER			MS114910332P
		1	9	8	646.3410	LH WIPER DEFLECTOR			
		2	8	9	646.3411	RH WIPER DEFLECTOR			
	2	2	7	6	647.7703	STRUT ASSY			
	2	2	7	6	647.0112	STRUT BRACKET			
	1	1	6	6	646.3511	STRUT			
	1	1	5	6	646.3510	STRUT			
2		2	4	6	646.3810	BRACKET			
	1	1	3	6	646.2910	DEFLECTOR			
	1	1	2	6	646.3001	LOWER CUTTER ASSY			
	1	1	1	6	646.3301	UPPER CUTTER ASSY			
X					646.4004	FIXED PROVISIONS KIT			
X					646.4003	CABLE CUTTERS 18 WITHOUT TIED			
	X				646.4002	AS320 WIPER DEFLECTOR KIT			
		X			646.4001	AS330 CABLE CUTTERS KIT			

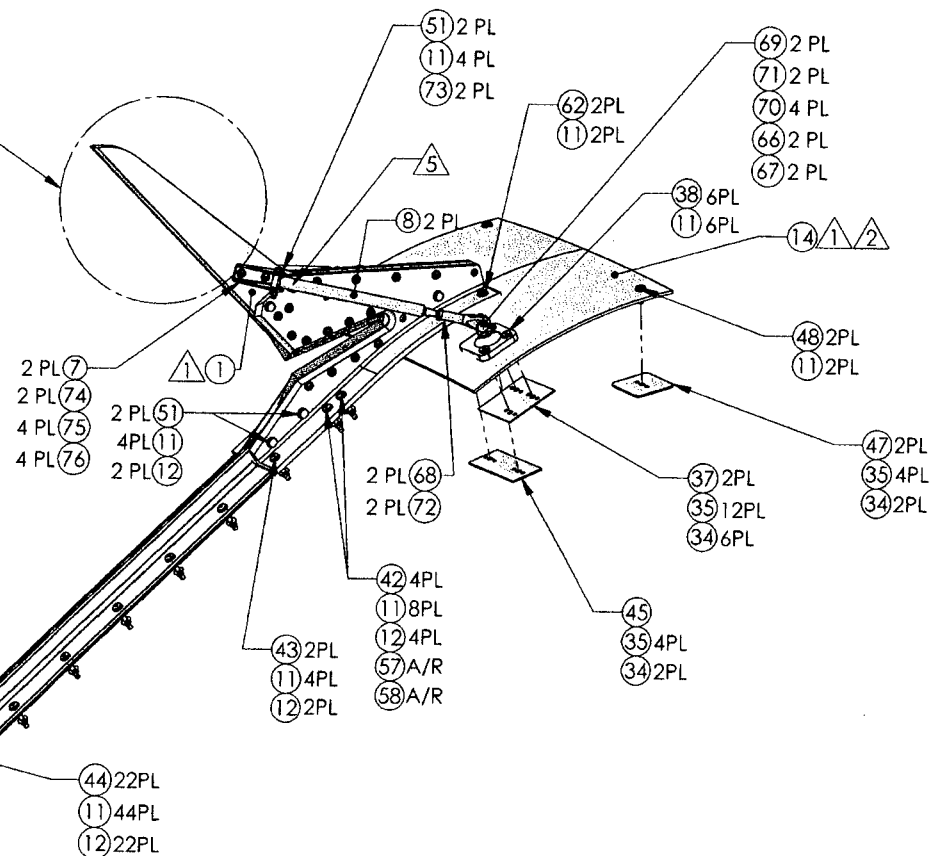
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4004	4003	4002	

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DETAIL D
TYPICAL GPS MOUNT KIT INSTALLATION

DETAIL D



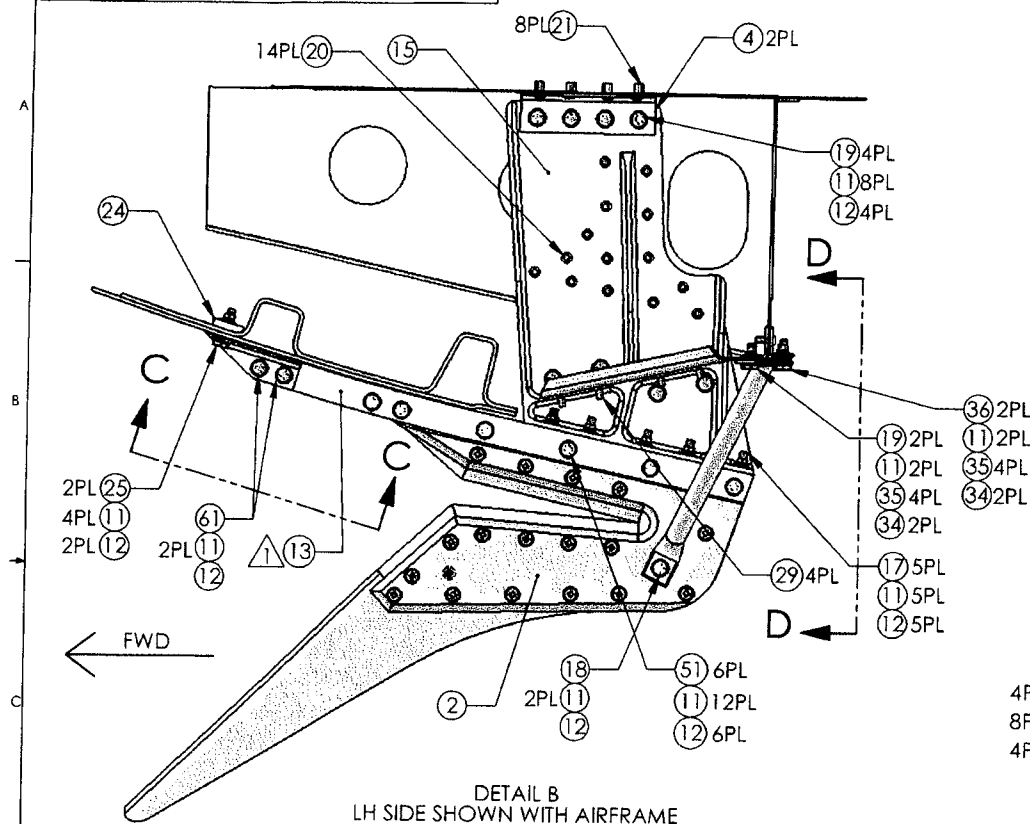
DETAIL A
SHOWN ISOMETRICALLY

ORIGINAL DATE 08-27-08		APICAL INDUSTRIES	
DRAWN BY S. HUFF		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKED BY P. BRADY		AS350 CABLE CUTTERS KIT	
DRAWING APPROVAL P. BRADY		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°	
CONTRACT NO.		SHEET 2 OF 4	
SIZE 8	CAGE CODE 07AM26	DWG. NO. 646.4000	REV. B
SCALE: NONE			

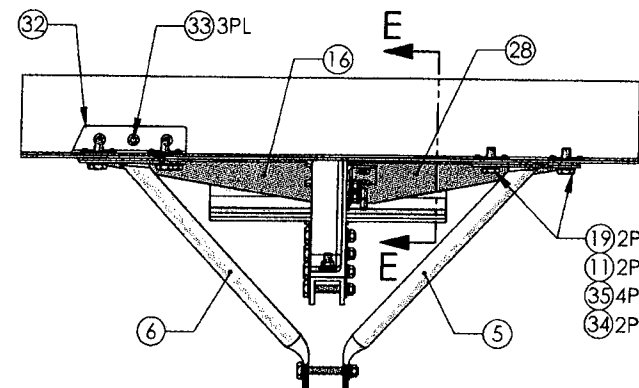
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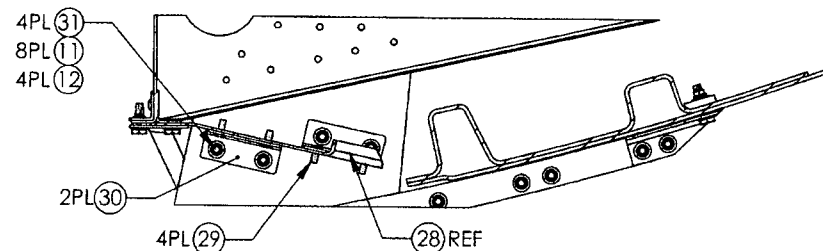
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



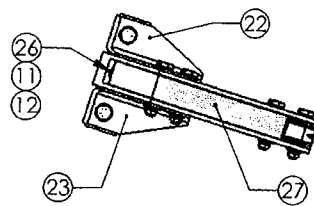
DETAIL B
LH SIDE SHOWN WITH AIRFRAME



SECTION D-D
CUTTER HIDDEN FOR CLARITY



SECTION E-E

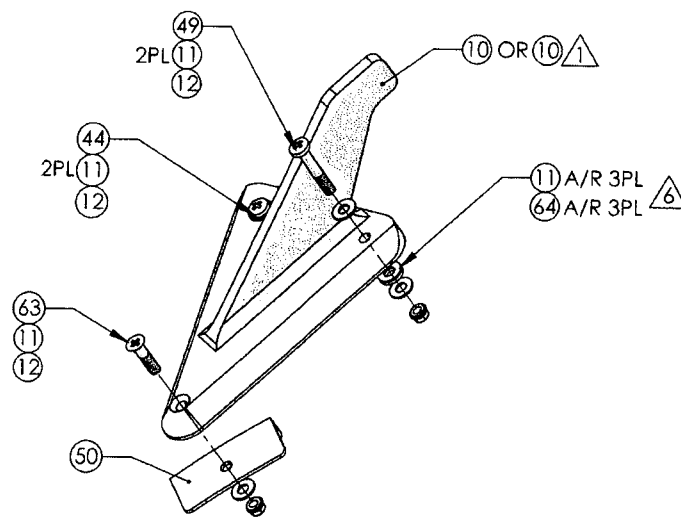


SECTION C-C

ORIGINAL DATE DWC-DAYTON 08-27-08		APICAL INDUSTRIES	
DRAWN BY S. HUFF	CHECKED BY P. BRAVO	2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DESIGNED BY P. BRAVO		AS350 CABLE CUTTERS KIT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SIZE B 07M26	REV B
SCALE NONE		DWG. NO. 646.4000	SHEET 3 OF 4

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



DETAIL C
LH SHOWN EXPLODED
RH OPPOSITE

ORIGINAL DATE (MM/DD/YYYY) 08-27-08		APICAL INDUSTRIES	
DRAWN BY J. HUFF		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
CHECKED BY P. BRAVO		AS350 CABLE CUTTERS KIT	
DESIGNED BY P. BRAVO		DWG. NO. 646.4000	
CONTRACT NO.		REV. B	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SCALE NONE	
SHEET 4 OF 4		SHEET 4 OF 4	

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO.		04731		SHEET 1 OF 2	
	DWG NO.	646.4000	REV:	A	PREPARED BY	J. SOTO
	DATE: 11/04/2014		EFFECT ON DWG ☒ INC. ☐ UNINC.			
	DWG TITLE: AS350 CABLE CUTTERS KIT					
APPROVED BY:		ENGR <i>T. Brown</i>	MFG <i>David Parker</i>	QC <i>[Signature]</i>	EFF. NEXT ORDER	
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: REVISED BOM. INCORPORATED ECN 03046 AND 03079.				

76	A	601.2764	4	4	WASHER	NAS1149FN832P
75	A	601.2973	2	2	LOCKNUT	MS21042-08
74	A	601.2988	2	2	SCREW	MS27039-0813
73	A	601.2943	2	2	LOCKNUT	MS21042-3
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11	R	601.1607	120	138	WASHER	NAS1149F0332P
8	R	647.7703	2	2	STRUT ASSY	
7	R	647.0112	2	2	STRUT BRACKET	

F/N	TC	PART NUMBER	.4003	.4001		
		QTY	DESCRIPTION		MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:					CHANGE CATEGORY	DER REVIEW REQUIRED
☐ MDL ☒ INSTALL INSTRUCTIONS ☒ ICA ☐ FMS ☒ BOM					☐ MAJOR ☒ MINOR	☐ YES ☒ NO